

Annexin A13 (H-1): sc-377327

BACKGROUND

The Annexins constitute a family of structurally-related, relatively abundant proteins that exhibit Ca²⁺-dependent binding to phospholipids. Annexins function in multiple aspects of cell biology including regulation of membrane trafficking, transmembrane channel activity, inhibition of phospholipase A2, inhibition of coagulation and mediation of cell-matrix interactions. Annexin A13 is considered the original progenitor of the 12 members of vertebrate Annexins. The expression of Annexin A13 is highly tissue-specific, being expressed only in intestinal and kidney epithelial cells. This expression is associated with a highly differentiated intracellular transport function. Two alternative splicing isoforms of Annexin A13 exist, both of which bind to rafts.

REFERENCES

1. Smith, P.D. and Moss, S.E. 1994. Structural evolution of the annexin supergene family. *Trends Genet.* 10: 241-246.
2. Waisman, D.M. 1995. Annexin II tetramer: structure and function. *Mol. Cell. Biochem.* 149-150: 301-322.
3. Mailliard, W.S., et al. 1996. Calcium-dependent binding of S100C to the N-terminal domain of annexin I. *J. Biol. Chem.* 271: 719-725.
4. Iglesias, J.M., et al. 2002. Comparative genetics and evolution of Annexin A13 as the founder gene of vertebrate annexins. *Mol. Biol. Evol.* 19: 608-618.
5. Morgan, R.O., et al. 2004. Evolutionary perspective on annexin calcium-binding domains. *Biochim. Biophys. Acta* 1742: 133-140.

CHROMOSOMAL LOCATION

Genetic locus: ANXA13 (human) mapping to 8q24.13; Anxa13 (mouse) mapping to 15 D1.

SOURCE

Annexin A13 (H-1) is a mouse monoclonal antibody raised against amino acids 271-310 mapping near the C-terminus of Annexin A13 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Annexin A13 (H-1) is available conjugated to agarose (sc-377327 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377327 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377327 PE), fluorescein (sc-377327 FITC), Alexa Fluor® 488 (sc-377327 AF488), Alexa Fluor® 546 (sc-377327 AF546), Alexa Fluor® 594 (sc-377327 AF594) or Alexa Fluor® 647 (sc-377327 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377327 AF680) or Alexa Fluor® 790 (sc-377327 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Annexin A13 (H-1) is recommended for detection of Annexin A13 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Annexin A13 siRNA (h): sc-60172, Annexin A13 siRNA (m): sc-60173, Annexin A13 shRNA Plasmid (h): sc-60172-SH, Annexin A13 shRNA Plasmid (m): sc-60173-SH, Annexin A13 shRNA (h) Lentiviral Particles: sc-60172-V and Annexin A13 shRNA (m) Lentiviral Particles: sc-60173-V.

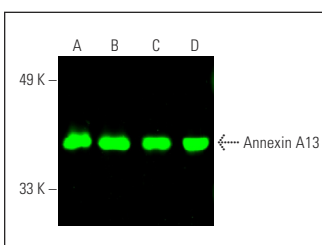
Molecular Weight of Annexin A13: 36-40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Caki-1 cell lysate: sc-2224 or HeLa whole cell lysate: sc-2200.

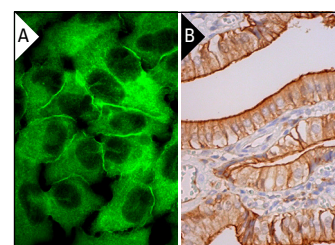
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Annexin A13 (H-1): sc-377327. Near-Infrared western blot analysis of Annexin A13 expression in Jurkat (A), Caki-1 (B), HT-29 (C) and HeLa (D) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.



Annexin A13 (H-1): sc-377327. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane and cytoplasmic staining of glandular cells (B).

RESEARCH USE

For research use only, not for use in diagnostic procedures.